

Waldo L. Schmitt

Diary, trip to Panama and Galapagos Ids., April, 1941.

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April 1, 1941. Had Malpelo in plain sight this a.m., though hazy.

Toward nine o'clock took couple of shots at it; at 9:30 we got in launch to make circuit of island and fish. Saw the old Hancock Exped. landing place to N.E. Toward southeast by cave saw moisture and some green algae; did most of our fishing about N.W. point. Capt. Pickens got a nice wahoo and a rainbow runner (I remembered it from the Presidential cruise). Laing and Dr. Blanch got a Pacific Amberjack apiece; Ernest got a colorado grouper.

Amberjacks:

1. Standard length 3'6" = 46 lbs. ~~Add~~ 11" for over all.
2. " " 3'4-1/2" = 40 lbs. Add 10" for over all.
3. Wahoo 44 inches 44" to base tail = 20 lbs.
4. Rainbow runner 20" = 3-1/2 lbs.
5. Colorado grouper, Mycteroperca olfax.
 dorsal = 11 spines, 16 soft rays
 anal 3 " 11 " "
 gill rakers, counting stalk, 16.

Ralph
 Caught by Ernest
 = 12 lbs.

Malpelo is very precipitous sided, well high inaccessible all around. Saw our old (Hancock) landing, but we could not land; had no official permission and besides no point to landing except I might have gotten a few specimens. Calm day, we could have landed had we had a mind to. No apparent vegetation other than lichenous growths here and there; lot of apparently nesting gulls, mostly small, of Galapagos species. Already mentioned one streak of moisture by cave near S.E.; had lot of bright green algae growths, but perhaps only 20-30 foot streak, irregularly a few feet or inches wide in places. In a notch in larger islet to south, looked at from west, a single slender stalk of a plant, maybe 2-1/2 feet high, like stalk of one of our dead century

plants minus seed pods, though there was something thicker at top end of stalk (? seed pods of another kind).

Hot as blue blazes today, or so it seemed. At 9 a.m. was 87° , then dropped down to 83, 84, 85° while we were out and around island; at 4-5 p.m. 88 & 90° (yes, ninety); and did I get dreadfully sunburned this first time! Don't look now, but my face and neck are as red as a beet, fore-arms, too (knees just pinkish; I kept them pretty well covered).

Supper is at 6 p.m.

The air trip I shall be able to show you in pictures; fine, quick, and interesting trip. Saw the two steamers (one German and one Italian) burning in Costa Rica; smoke went up in oblique streak for couple of miles at least, or more; we must have been 12,000 to 14,000 feet up. The ships looked about $1/4$ inch long.

Dr. and Mrs. Zetek were at customs at airport to meet me. I'm glad they were, for had not Zetek come I would have been sunk for want of gear, rather the bottles I asked him for. He had everything. Later I thought of few towels and bought them in Panama City. We were terribly rushed because the Zone commissary closes at 5:30. We only got there at 4:45. The darned customs man held me up (rather immigration, not customs). Should have had my passport. Snoopy guy; I should have gotten special dispensation, but Zetek had already written the authorities about me. He is certainly the most helpful and thoughtful man and no mistake. I am forever thankful that I know him well. Asked after all of you, the family, the kids, Hildebrand, and Miss McCain, and I remembered each of you to him and Mrs. Zetek.

Captain Pickens came down, too, with Commander Resner, and took all my bundles to the ship in their auto, which certainly saved me a lot of time

and trouble. I could not have gotten a finer man to skipper this outfit had I had anything to do with it in the first place--a classmate of Callaghan's and Foster's. A nice group of officers, mostly younger men. And is the Mallard crowded? Ralph H. Ernest, who is to do some land surveying, is my roommate in the pilot house, where we sleep on cots which we fold up during the day. Our clothes are draped over the speaking tubes and instruments. We each have two shallow cupboard shelves and a wooden box for our surplus gear. Wish I had had time to bring along the usual collecting outfit I carry. I could have done some nice collecting. We are a submarine salvage craft (a converted mine sweeper) and we have no end of hoists, diving equipment, and cable with which I might have dredged. There are two captains aboard, Capt. (Freddy) Laing, who went to the Acad. with Brady's (snake boy of Wash. and Museum now in New York) brother; Laing is Captain of Mallard, Pickens is Capt. of whole expedition, which includes six subs. One of the officers has a citation for helping with the Squalus rescue. I hope to get a full list of names soon. Eats are good (and a reasonable mess share).

Had our Neptune party today 1-3 p.m. for about 30 men, a very lively, well dressed party. Davy Jones had an admiral's coat made of a blue shirt cut to swallowtail behind and an edging of yellow tape clipped on to shirt and collar edges with paper clips! A very effective get-up, all were barefoot. You should have seen the royal dentist's drill--several lengths of broomsticks or mop handles fastened together with screw-eyes so that the ~~rig~~ rig had sort of universal joint connections; had a string to counter weight so attached that when he wasn't using it, it would life up out of the way. Under a cloth ~~app~~ at the end opposite the business end he had an electric drill concealed which he turned on when he started to shove the other end around in the victim's mouth. The whirring noise it made gave a realistic sound to the rig

and did the victims get frightened and squirm! The "baking mills", besides quinine, had epsom salts in it, and when the dentist got through he squirted a generous shot of engine oil out of a large oil can in the victim's mouth. The dog they have for a mascot here was also put through or over the barber chair and dumped into the tank. The pollywogs outnumbered the shellbacks three to one, but were not organized and so did not gang up on the shellbacks as has happened on other ships and at other times. A few pollywogs who tried to get tough got shoved around a bit, but there was only one casualty of the day. In some preliminary scuffling one man's head got banged up against an iron plate; painful, but he'll survive said the doctor; and he'll get his certificate, too. Colored mess boys went through like everybody else and Filipino cook and captain's boy, too. The royal barber cut out very generous chunks of hair from every head, some worse than others.

Tomorrow, April 4th, we arrive off Salinas for some survey work and to take oil at La Libertad; just one day only, but we'll get a chance to get off a few letters and little else. As in all Navy outfits, we have movies each night. Saw "The City" or "Big City" last night and "Alias the Deacon" tonight. Was funny, a gambler who unwittingly does a lot of good in a small country town with money he gets away from the wicked town banker, etc.

And now after movies I am winding up this scrawl.

Got the first eleven drift bottles fixed up for casting overboard the day we leave Ecuador, one each noon position until the 24 are over. Hope I get some returns from them.

What haven't I covered that you want to know about? Coming down airplane certainly cramped my style, as I have no collecting gear whatever and I miss some of the books I'd like to have--"Birds of the Ocean" for one. Pickens said he had collected land shells for Bartsch before.

The weather is cooler today (this afternoon), nice breeze this evening blowing crossways of our pilot house (both doors, one each side, are open) is so strong that papers must be weighted down or out they go; yet it's balmy and nice withal.

We had wahoo yesterday for lunch, but way cook fixed it, it was too dry.

This will be only diary mailed; no more mail until I get back to Panama, except maybe a note at Post Office Bay, where we all plan to deposit some mail. Crew is most anxious to do this.

Wind N.W. 2 - 1 SW 2

Temp. (a) Dry 79-91. (b) Wet 76-84. (c) 76-82.

Weather: BC and C.

April 2, 1941. At Malpelo 8:30 a.m. to 1 p.m. Circled Island fishing. Caught 2 large Pacific amberjacks by submerged rock near N.W. corner of Id. and between it and islets adjacent.

Wind, SSW, 2, S, 4, 5, 2 to S.E. 2.

Temp. (a) 83-92. (b) 78-82. (c) 80-82.

Weather B - BC

April 3, enroute Salinas, Ecuador.

Wind: S.W. (1) - S (2). SSW (3-4). SW. 2.

Temp.: (a) 83-88. (b) 77-81. (c) 82-83.

Weather: BC - C - BC

12-16 special watches posted as directed by Neptunus Rex.

1340 Neptunus Rex, Royal Queen and Royal Baby.

1535 (Party over), Royal Party left ship, ~~xx2150x~~ Jolly Roger hauled down. 2150 Sighted steamer lights, passed tramp to port dist. 2 miles. Only steamer passed or seen on cruise.

April 4, 1941. Salinas , Ecuador. Collected low tide 1:30 to about 3:00 p.m. Left Salinas at 6 p.m. Bought dozen small (4 oz.) Welch grape juice bottles, 1 sucre each; \$1 for the lot.

Wind: S. 2-3-4-5.

Temp.: (a) 84-87. (b) 77-79. (c) 83.

Weather: BC - C.

0945 Anchored Santa Elena Bay, 10 fms. E. Watkins and Ecuador-ian.

11.13 moved into 6 fms. 17.45 underway for Galapagos.

April 5, 1941. En route Galapagos.

Wind: SW 3-2, S. 2-3-1.

Temp.: (a) 82-89. (b) 77-86. (c) 83-80-82.

April 6, 1941. Enroute Galapagos.

Wind: S.1 - S.W. 2-1.

Temp.: (a) 80-88. (b) 77-81. (c) 82-84.

Weather: BC - C - BC

April 7, 1941. Anchor 3 miles east of Freshwater Bay, Chatham.

Landed first on white sand beach we called Blanch Beach (after our medico). Later moved down to waterfalls and larger stream that I had visited with Hancock back in a little bight with shingle beach. Lower reaches of stream impassable to growth only way is to strike inland for quite a ways crossing a sizeable tributary to the main stream.

Tcnel, Meneses Peñaherrera, Territorial Chief, San Cristobal, Galapagos Islands. Interpretor: F. Polanco. Dr. José Ribadeneira. Mrs. Karin Gulberg Cobos.

Got in in early afternoon. Dr. went ashore and after his return about rest of us went ashore and called on him. Pineapple bananas 2 rounds whiskey, but nobody drank water. Took picture of group. Wreck

Bay part big cleft; closed crater 3 miles strike high cliffs with waterfalls and gap with river, got bottom sample in 25 fms.

Wind: S. 3-4-1. S 4-3. S.E. 2.

Temp.: (a) 82-94 (b) 77-84 (c) 82-84.

0005 Drift bottle No. 4 over.

0800 Anchored in 25 fms.

0828 Landing party on beach.

0959 " " " second beach.
Anchored in 26 fms.

12.33 underway.

15.28 anchored Wreck Bay, 7 fms.

15.40 ~~Black~~ Black ashore with papers.

1905 Governor Manese came aboard.

15.28 anchored in Wreck Bay, 7 fms., 35 chain; port Anchor.

Eastern edge of pier 169°T. R.T. Chatham Id. 240° T.

April 8, 1941. Tuesday. Enroute to and at Acadmy Bay. Forenoon only 8:45-11 a.m. "Collected" samples of spring water, very brackish. Took pictures of soldiers lined up and of Finsen's house. Afternoon made South Seymour Aeolian Bay, rounding Indefatigable to the eastward and around N. end of North Seymour. Crew handlined a dolphin going around; got a few copepods off it.

Wind: S.E. 2, SSW 3, SW4-7.

Temp. (a) 78-91. (b) 77-82 (c) 82

Weather: C.E. OP (4 a.m.) - 0 - OPC (13 p.m.) - 0

0255 underway out of Wreck Bay.

0825 anchored in 15 fms. Acad. Bay.

0850 boat to shore with party. Capt. Luis Paredes.

1045 ship boat ret'd.

1109 underway for S. Seymour.

1636 anchored in Aeolian Bay S. Seymour in 7 fms.

April 8, 10:05 p.m., 80°. South Seymour is generally green, greener than I have ever ~~seen~~ seen in three visits; yet there seems to be no standing water. Captain Picking and Reznor could not find any this afternoon after a ~~partial~~ partial search. I shall look tomorrow, too. Reznor found a hippa on the beach, my first one this cruise. The greenness is quite universal, grass that was ever known before is now fresh and green and with fruiting plumes. When Captain was here in Erie in December he found a running stream. About four we got ashore with tide gauge party and camp party. Now at 10 I can see their camp fire, in fact at 10:12 it's out. They must read gauge each half hour day and night; be an light and field glasses. Also have small portable radio phone ashore for talking to ship.

cut in fashion on a
 Aeolian Bay is ~~name on~~ a stenciled piece of galv. iron, underneath
 is sea turtle shell, ^{forming} a roof over a ^{small 3x5 black covered} book in which visitors may write names.
 Surprising number did. Lapwing in ~~at~~.

E.L. Apr. 8th, 1941.

Hundred little turtles, several needle fish and skate. Lots of copepods.

April 9, Wednesday. South Seymour, forenoon. Ashore with Capt. Picking to plant signal on highest point of bluff to south of lowland running back from Aeolian Bay. Discovered lakes and took picture of mother pintail and 8 young. Saw lot of yellow legs; very restive, flew away at slightest provocation; no chance to get picture.

Afternoon, aboard looking after clothes, letters, and specimens.

Wind: SE 2-3-2. Afternoon S² - SW² - S⁴

Temp.: (a) 82-88 (b) 70 (?) - 84 (c)

Weather: BC

0803 party left ship.

April 10, Thursday. Ashore at 7:30 (up at 6:30, breakfast at 7:00). (Other days before ashore at 9 or 9:30.) Hiked inland to duck ponds in a.m. with Barron and Freddie by keeping to right from landing beach kept in fairly flat grass country and missed most of rock rivers; besides mother and eight young of yesterday, saw a male and female whic, however, I did not photo, did make some iguana shots and several of a Tropicurus. Clear, hot, and sunny (yesterday up here in shade = 87⁰). Got back to ship at noon.

After lunch it clouded up and began to rain. Drizzled off and on all afternoon and until 6:30 supper, late part of rain very heavy. When I came out in a.m. Hansen told me of ducks nest he'd almost stepped ~~on~~ in when he was out. After lunch he showed me place but duck hopped off nest and remained off whole time we were in vicinity; in rain snapped few pictures of nest; right in grass, lined with dry grass, bits of feather, very exposed yet difficult to see, eggs were cream color. Some looked a little mottled with greenish or bluish - 8 eggs in nest, one out in water before nest. What could have happened? No No. of eggs same as number of young with mother. Lakes as big and as extensive as those seen yesterday and in a.m.

Yesterday in lakes saw a heron and several yellow legs, but neither day could get shot at them, very wary, jumped into flight at least provocation. Today by duck's nest saw a phalarope. Sat down under tree to watch duck's nest, but ducks did not come back. Iguana half under rock. Rain kept me from taking picture of its ostrich-like hiding of head and forepart of body; save a few leaves of trees. Got back hour before supper, 5 p.m.

April 10, forenoon. Went back to "lakes" with Freddie and Baron so they might photo ducks; no chance at yellow legs today either. On way back caught iguana for Freddy to be photo'd with. Skirmished around by myself a while, believe I got a shot at a Tropicurus lizard.

On way back to ship met Hansen, the movie operator, coming back along goat trail paralleling northern bluff of low land back of Aeolian Bay. He told me of a duck's nest he happened upon and almost stepped on over by other lakes near eastern shore of island; so after lunch I prevailed upon him to wander back with me and show it to me. Dark and drizzling, but, nevertheless, tried a few shots (lucky I did because I did not get back). Saw Geospiza nest with bird flying in and out feeding young? and great goat assembly place. Can lakes over here be permanent? [I doubt it.]

Wind: SW 2-1-2-3-2-1.

Temp.: (a) 78-90. (b) 75-85. (c).

Weather: ~~22~~ C-D-C-BC D-P (20 p.m.) - C

April 11, forenoon, Friday. With Captain Picking and Lynch walked north across higher land at Camp at Aeolian Bay, along western shore and beaches of South Seymour to N.W. promontory where signal was planted (No. 2). First was on sand beach (No. 1 flag) about half way to point. Then angled across to north edge of high land and in goat trail along it to N.W. point. After planting this, walked to edge of this higher land and angled across

lower level to point half way between Goat Notch and camp site which line continued brought us out at camp. Got a few pictures enroute.

In afternoon (rough notes are blank?) Dr. and I went on beach to examine stomach of dead seal (sea lion) that ~~sailors~~^{fishers} had hauled up on beach in turtle hole to day. Had planned first a short run ashore, ~~xxxx~~ sub boat took us in only. On beach our self bailing surf boat (better to be called self filler, it had to be continually pumped out) was being worked on by half the crew. It had filled up while tide to buoy off beach, from which we rowed in in dory (first few landings from nose of motor boat were not so successful). Once during first or second day after our arrival at S. Seymour got the boat sideways on beach and only after a great deal of effort got it launched again.

The seal stomach as in perfect condition, neither lesions or worms; afterwards Dr. regretted that we had not examined lungs or heart. (As I have always maintained, every trip is filled with vain ~~xxx~~ regrets.) Like sulphur at Villamil.

This night, Friday, April 11, gave a 30-45 min. talk to sailors and officers of "fleet" just before movie show, on ids. touched on geol., dist. animal life, and of course by ~~xxx~~ popular demand tragedies. Did get sympathetic interest in men. Captain Picking spoke first a bit about Porter by way of introduction.

Wind: S.W. 1 S.2 SSE 2

Temp.: (a) 83-88 (b) 78-80 (c)

Weather: BC - C - CP (14 p.m.) CE OP (17-19 p.m.) - CE -C

April 12, forenoon, Saturday. Transferred over to sub No. 46, Capt. Lynch. Steamed over to Conway Bay from alongside of MALLARD where 2 subs, including Lynch's, had been tied up alongside. These subs rub and bump against MALLARD quite sharply at times, enough to feel it in your sleep at times.

Subs are great craft, very compact, no space to waste. Men aboard get quite used to it; some bunks are just 18" below those above. One gets quite clever at stepping through (like hurdle racer almost) little 4-foot high, 2-foot wide doors; some are couple of steps up or down, as deck levels are not same in all compartments.

The toilet is quite a mechanical contrivance. All inlets from sea, like flush water, have two valves, air alst has two, also discharge opening. Seems very complicated at first, but very logical and simple after you get hang of it. After using, one opens two flush valves, one after other, before water flows. Then you pull lever to dump bowl into hopper below. Then open air valve, and pull change lever right way, watching pressure gauge up to 20-25 lbs. Next open outside discharge valve with (life up and down lever), open gate valve by rotating wheel, and last move charge lever the other way to discharge side; when container below closet bowl is blown clear. Last, shut off valves.

Had nice lunch aboard in small ward room. It is just separated from rest of compartment by a light ~~partition~~ partition which, because of type of sub and need for getting out batteries, does not extend to deck underfoot and has no doors into staterooms just off side of wardroom or portion of crew's quarters just forward of it in same compartment. Just two toilets on whole sub.

After lunch went ashore to see what possibilities of hiking inland were and after great deal of hacking at thorn bushes which formed an almost impenetrable wall just back of beach reached a little more open ground with so many lava dykes that it was rough going. Result was that without compass we made a sort of S sorties twice paralleled beach and so made very little headway inland. Constant hacking and blazing of trail, breaking over small trees; and slicing off ends of cactus pads, this made one of best blazes,

visible a long way off. Captain Lynch suggested paper. Tablet paper was little difficult to anchor (on James he used toilet paper, which, though it hung well from trees, was a little flimsy and in heavy rain tended to come down. This does make one think that roll of right kind of paper would make excellent and durable trail marker).

After a couple of hours wandering around discovered that ~~they~~ the other shore party, Lynch and Dr., climbing over Sand dune to left (or eastward of best landing beach had found easier access to beach. Two of his men came in and found us and we went out that way. Should have had a compass.

After coming out had dip in ocea and it was refershing beyond words; after supper up till midnite getting packs made up for next day's real try inland. Sailmaker made up several small bags with shoulder straps. 16 lb. pack, 4 lb. canteen water, plus hunting knife. Took:

- 20 hardtacks square
- 1 can orange juice, 12 oz.
- 1 can tomatoes, 1 lb. 12 oz.
- 1 can raisins, 2 lbs.
- 1 bottle mosquito dope
- 1 pr. (extra) socks.
- some bacon
- Camera
- 3 extra film rolls
- 1 light meter
- Rain coat (my case) or poncho other
- 1 canteen holder (belt) and cup.
- 1 hunting knife
- 1 machete
- toile paper
- 1 med. forceps for Cactus spines
- 1 towel
- Handkerchief
- Extra glasses

Wind: SSE 3-2-21 SE 2-3-4-3-2

Temp.: (a) 83-88, (b) 78-80 (c)

Weather: C -CP (3-4 a.m.) - CP -C C C C C

April 13. Up at 5-5:30 a.m., ashore, and started by 8:30 a.m.

We had our shore excursion. Went over to beach Sunday a.m. Got parties organized and started away from shore about ~~8:30~~ 8:30. Walked and hacked our way inland by a devious route, as we thought and hoped toward the crater we had picked out from shore on Saturday afternoon and from ship as we were coming in in sub to Conway Bay or rather from boat approaching shore because we could only see it at some distance away from land. It was impossible to keep to the right direction, as it proved later we went 'way astray. Both in forenoon part of jaunt which lasted (with a few brief rests) till 11:30; and later on our 2-hour continuation of journey. As I have often said each of these Galapagos Islands is a different kind of a Hell, and the north side of Indefatigable, this side of first ridge down to the shore, is no exception and, moreover, is one of its own peculiar kind.

The brush here on Indefatigable seemed particularly bad and abundant and required pretty constant cutting (if not blazing) to find our way back. Lava dykes much fractured, some loose pieces with danger of turning ankles most of the time.

Going we cut brush off of steep slopes unwittingly where it would have helped our return trip when descending these same steep slopes. Climbing up steep "hillocks" or piles of lava (or lava dykes, seemed easier and safer than coming down--coming down there was always the danger of slipping and being precipitated into a giant cactus of which one always seemed to stand next the best place for going up and down; if not falling down the slope on to other rocks below.

These large Opuntias made grand landmarks when tip of pad was sliced off or if trunk was blazed on the side. I wonder how serious an injury this is to a cactus; or do they have ready powers of repair? How soon repaired, and if cutting may be done without great detriment to plant?

After the luncheon stop we pressed on but scarcely for two hours with frequent rests; the morning had about exhausted us. At about end of two hours more we decided going was just too tough and besides hopeless, so we camped, after scouting around to find a bit of a level place. Began to rain quite briskly about time we got bedded down. Spread ponchos and my raincoat to catch water. We got plenty of dirt and debris, surprising amount I thought. Small debris and dust seemed to wash down off leaves of trees. Each poncho caught it seemed about a canteen and a half of water. This poncho water tasted as ponchos smell and plenty strong at that. We put lemon juice and sugar in it. Young put in a bit of brandy. These additions helped kill the dreadful poncho taste. To get my rubber raincoat collected water used a tablespoon. It tasted tarry as H. I could only down just so much of it. Thought if I took any more than the dozen or more tablespoonsful that I did that it would nauseate me. Perhaps it was the mixing of poncho and raincoat water that produced the effect. So the crew said.

The birds, particularly the mocking birds were a nuisance, dropping droppings right and left on men and ponchos as they were playing around in the trees over our heads. One of the mocking birds chased a female fly catcher away.

Had some difficulty in getting fire started with the punk wood of the surrounding trees. Had not Barron built us a couple of Beeswax candle ends I ~~don't~~ doubt if we would have succeeded. Made quite a large fire after we got it underway. Was seen from deck of sub. At 8 Crawford signaled sub with Veery pistol and got an answer from Lynch. We were just up near crest of slope of 2nd (?) ridge. But Crawford had to climb a tree near top of ridge to get enough elevation to see Eden Id. Only got up here by turning at right angles to course we had been pursuing. With sun so high in heavens, especially around noon, it is not much help in directing one's course.

Wind: S.E. 1 - E. 1 - S.E. 1 - E.S.E. 2 - S.E. 1-3-2

Temperature: (a) 82-89 (b) 72-80

Weather: C - C BC - BCP (23 p.m.) - C

0728 1st party ashore.

April 14, Monday, a.m. Returned from farthest inland. Had a spotty night due to mosquitoes. "Dope" helped for short intervals. One covered body as completely as possible. Tied pants to top of socks so there would be no gap between; also shirt or coat (I had raincoat) needs to be buttoned up tight to neck and over exposed part of face; around ears and back of neck put towel saturated with mosquito dope; ditto spare shirt which pulled up under chin and covered hands folded on breast. One hated to move and practically didn't for fear of disturbing "covers" and letting mosquitoes in. As result of all covering, ~~xx~~ only nose was out and enough of cheeks so that eyes could see out from under towel and watch moon's progress across sky from east to west. Cloudy sky at times with silhouettes of leaves of trees against the gray (luminous almost) backdrop. Bed was brush (springy) ~~fixt~~ piled up high enough to cover inequalities of ground surface and "pinnacles" of rock. Fire was kept going most of night by one or another member of party. Started rain again at earliest daybreak and everybody almost automatically got up to prepare for breakfast and the march back; You know, it takes pretty good light to see what's what of rough terrain, fractured lava blocks in all directions, up in frequent mounds and dykes, with unexpected holes deeper than one's leg at times and enough to break your leg; smaller holes, too; got my toes bent up so sharply in one that I thought my foot had gotten pressed into V shape. It hurt for quite a bit, but one did not have much time to think of hurts or cuts, scratches, cactus spines, or thorns, for if your attention flagged a ~~xxx~~ mere moment you might miss your footing, trip over a vine, or brush too closely against a cactus.

April 14th, Monday. The mosquitoes were pretty bad all night but "dope" did help; tied pants down about tops to keep pests out of bottom end. Put a raincoat over bare skin above, because shirts were wet and even wet undershirt was too hot and steamy to tolerate under raincoat which I had to button to neck to keep mosquitoes out. My white hat was soaking wet, too, so to protect head, put my piece of towelling over it, tucking it well around head and over ears so that I could barely see under part of edge, and just tip of nose stuck out. Over bare hands folded across chest I laid my khaki shirt to keep mosquitoes off them; top edge of shirt was pulled over chin and tucked about neck to meet towel. Even so, the mosquitoes were troublesome, as it seemed at least, I woke up about every 15 minutes to put more dope on edges of rag (towel and shirt), on tip of nose and chin, cheeks, and hands. Cheeks must have been a bit sunburned, because dope stung a bit; and once I got some in eye. Also put some on so that mosquitoes would be deterred in biting through shirt and ditto on exposed tops of socks between shoe tops and tied down pants bottoms. I got pretty stiff and cramped not moving so far as I could make out. Guess I was afraid to turn much for fear of exposing some part of me to mosquito attack. As I learned later, some one or other of party was up all night tending fire because couldn't sleep. After supper I fell so sound asleep that I did not witness pistol signalling, woke up just about time it was all over. Crawford had signaled ship with his flashlight. These are heavy to carry, but great for signalling great distances if you know the Morse code.

No one craved any solid food, just liquid, liquid, liquid--anything with liquid. Canned tomatoes were very welcome, but weight was against them, yet the fact ~~that~~ it was like carry that precious commodity water compensated for the fact. We ate up at least one can of raisins, couple of hard tacks and couple of strips of bacon. Sugar and tea went over great;

had some after I woke up after the signalling had been completed; later had Capt. Picking's brandy. Went over big with the men.

The branches of ~~the~~ the "rubber" (sap) shrub made a most ~~resilient~~ resilient couch and I honestly did not notice the rock points I could not reduce by hammering on them with other rocks. (Saved some of this shrub in my camera bag.)

Toward early, early morning it started drizzling again and as though by common consent, or rather automatic simultaneous reaction, we all got up and had rest of canned tomatoes for breakfast with little bacon and hard tack. Bacon and hard tack ~~xxxxxx~~ were very thirst producing. Raisins went well, but all we craved was liquid and light fruit juices.

We started back at ~~5:10~~ ^{little before} minutes of 8 and made lunch place of yesterday at 8:15 a.m. in just about 40 minutes. No blazing to do and little or no chopping; covered back two hours advance in less than half time. At lunch place drank can of water cached there, also the rain that had accumulated in the empty tins ~~xxxxxx~~ that Capt. Lynch had put around after lunch; had a quarter to half inch in each it seemed.

The last stretch from lunch place to beach took us 1 hr and 15 mins. After return to beach were met with bowls and cans of grapefruit, and did it hit the right spot. Would never had believed it could taste so good. Capt, Lynch's group made back to beach in 55 mins. (we took 1 hr., 15 mins.).

Went fishing with Dr. and Capt. Lynch after lunch in late afternoon. Got wahoo, ^{rf} ~~siena~~, and grouper out of lagoon and off it.

Wind: E.S.E. 2 - S.E. 1-2-3-4-2-1

Temperature: ~~xxxxxx~~ (a) 81-89 (b) 76-80 (c) 82-84.

Weather: CCC - (11 a.m.) R-O-C C C

0725 1st party left ship. Ship moved about taking soundings while shore parties were away.

April 15, Tuesday, 1941. I did like the spirit of the men who had made the hike of Sunday and return Monday. Everybody was willing, but without compass it was a futile proceeding.

Anyway, this a.m., four of them went inland with me over new trail we cut inland from head of lagoon which Rider found opened up a pretty open country (W.W. Collins, Mr. G. Snell, R. G. Cook, B. E. Rider). We got quite a ways inland and returned at 11 a.m. to ship for lunch in beginning of rain which started in earnest at noon. We discovered ~~an~~ extensive fresh water pools beyond salt lagoons quite palatable water of which I drank half a glass of it from canteen full I brought back to ship.

It rained off and on, brisk showers all afternoon; every pot and pan aboard collected water, and everybody took personal bath out in rain and washed clothes. C.P.O. Young estimated that at least 200 gals. rain water was collected by little awning bet. 12:30 and 6 p.m.. (Awning is perhaps 40 feet long by 9 wide at one end, 12 at other.)

At 4:20 put out a cracker tin took in 7 a.m. on 16th but most of rain had fallen in previous afternoon. Got 1 inch in bottom. Rained from 1 p.m. till after 10 p.m. (5-3/4" inside dia. "Oven fresh saltines by Keebler". Net wt. 16 oz. Keebler Weyl Baking Co., Phila., Pa.)

This a.m. we walked inland for about 3 hrs, including trail blazing, got back in 30 minutes +.

Crew got herring-like fish, *Opisthonemus* with gig at electric light. Ashore got a blue crab, soft, in lagoon. Tried for pelican picture.

Wind: S. 1-2, N.W. 2, E. 2, S.E. 2 most of time.

Temperature: (a) 78-91 (b) 75-85

Weather: BC. C C C C BC C CP (19 & 20 p.m.) * OR (21-24)

0735 party ashore.

April 16, Wednesday. Went ashore this a.m. after breakfast to get few pictures of shrubbery (& spec. of trees?) particularly of the rubber sap shrub, for determination. This was day got canteen of water.

Still overcast this morning. Dr. Blanch and Crawford went ~~for~~ fishing. Almost too dark most of time for real picture taking but hope I got a few good ones. Collected a few scraps of plants.

After lunch ~~xxxx~~ ran down past Eden Id. south along coast to see if could discover cove from which old road to plantation started. But visibility poor.

Got back to South Seymour in time to straighten up belongings before supper and hear about Capt. Picking's report on South Channel Basin for lab and Navy site; we could take advantage of their facilities by locating there; water tanks and maybe power plant or be independent on other side, but place would need buoys and wire drag.

Wind: S.E. 1-2 S.S.W. 2, S.W. 2, E.N.E. 1, E.S.E. 1-2.

Temperature: (a) 79-89 (b) 75-81 (c)

Weather: R - C - V * CCCC - BC - BC

April 17. 9-2:30 a.m. enroute James Bay. Clear and sunny, snapped Daphnes, Jervis, and S.W. and W. of James Id. Got good shot of ~~xxxx~~ crater with salt in it. Left S.Seymour at 9 a.m., arrived James Bay 2:30 p.m. about dead low water. Clear, bright, hot day. ~~xxxxxx~~ Went ashore to scout around for grave site. 2:30-3 p.m. ashore in James Bay looking for ~~xxxx~~ Cowan's grave. Meanwhile, sub got 2 large fish, one undoubtedly a "goggle eye" 29-1/2 (standard length) inches long and other a ~~xxxx~~ grey thread in bass of 19-1/2 (standard length). Also got 2 pieces red lava from pinnacle near where Houston dug for Cowan, a shallow excavation.

Amount of growth makes it impossible to find any grave and disintegration of red peak has undoubtedly covered everything with 6-8 feet of soil in the 120 years intervening.

The greenness and verdure of James is unbelievable between Hancock's and President's cruises and now in mid April green and wet. (Weitmers said unprecedented wet season and I can well believe it.) Even the red pinnacles were covered with verdure and dripping (oozing) water on sides; got a few ferns from them, maiden hair ~~xxx~~ on lower one, and incised leaved one higher up. Also few isopods.

Captain before movie show tonight offered \$10 for man who discovered first real clew to site and \$10 for man who found body or bottle or definite clew of buried body.

Bad impetigo all over shins.

Beautiful clear starlit but otherwise black night, to eastward and low down upside down dipper scarcely ~~xxxxxxx~~ above horizon pointing to north star way down low below the horizon.

Jervis (Rabida) has a good landing beach on N.E. side where island is low. Seems to be a waterfall in second (last) gully to left of James Bay, needs a closer inspection. Nice park-like land to right of rocky, east end of beach.

Wind: S.E. 3-2 - S. 3 - N.N.W. 2-3, W. 3, ~~S.E.~~ S.3 - S.E. 1-3.

Temperature: (a) 82-90 (b) 76-81 (c) 82-84

Weather:

0855 underway leaving Aeolian Bay for James Idl

1443 anchored in James Bay, 7 fms.

April 18, 1941. Friday. Forenoon: Accompanied digging parties to rise of ground between lagoons; under shadow of and beside red rocks. Captain and one of sailors assisting helped with getting land shells. Captain also got a centipede. A great many snakes were flushed among rocks, grass, and brush, but sailors were a little leary about grabbing them. If anything, the officers were more shy than sailors but, inhibitions notwithstanding, in the couple of days at James the crew got me two striped snakes, fine, large, and well fed appearing specimens. A lot of digging was done, on ~~xix~~ site Callaghan had started to excavate. Under the "red" rocks standing up in isthmus between the lagoons seemed to me a most likely place, but the rock had so ~~dixxin~~ disintegrated that much of what must have been a formidable peak (obelisk) had tumbled down. One piece almost as large as the one standing lies at its base. As the thing looks to me--in the 128 years intervening enough disintegration of the red rock has taken place to furnish not the huge masses that one deposited about the remaining pinnacle and many others of various lesser sizes, but also a lot granular soil 6 to 8 feet deep (perhaps) in places so that all traces of the grave, if any, have become wholly obliterated or at least covered up. All other ideas notwithstanding, under the pinnacles between the lagoons seems the logical and best naturally marked (prominent) place for a memorable site.

By the way, the lagoons were full (very full) of water, and the northern (I would say eastern) one is very large, wide, and much too deep to wade, than when I was here in '38; then it was knee deep all the way across and, moreover, was divided into two by a sand arm. This all now explains the complete absence of flamingos to me, the water is much too deep for the birds to feed on the bottom, as is their wont; and also any nesting sites (if any here) favored by them were inundated. Wonder how nesting season compares to dry or rainy season?

I believe all surface markings of ~~Wm~~ Cowan's grave have now disappeared or been covered up by the years of accumulation of soil, rock, and vegetable debris. Meanwhile, Captain Laing thought he had ~~simon~~ discovered an artificial mound of lava boulders. Everybody went over to inspect it at east (north) end of ~~xxxxx~~ beach on high ground back of boulder-fronted rocky shore, but it was soon agreed that it was a natural dyke or mound.

af
April 18
1941

This night we had an elaborate chowder party ashore and, in order to provide fish for it, Captain Picking, Freddy, and I went out in motor launch to do fishing for it. This took us to eastward of James Bay past dry ~~gxxx~~ gulch and waterfall, around high split to narrow bight with brown (on close inspection, red) sand beach. Here Captain and Freddy went in to land, taking me with them. This is a place Porter passed up because of surface and with Fred Ziesenhenné and I on one of the Hancock visits to James were afraid to tackle (for this sort of landing). I believe a dory is better than a skiff and when I remember the old Albatross days I believe the round bottomed affair we called a pram better yet.

The open grassy slopes of this bight are a great gathering ground for burrows and goats. Saw 7+ of former and several hundred goats; many with hind half white and front half red-brown. Also a couple of sea lions on beach; one little pup so thin would could see and count his ribs without difficulty. We got in and out ~~xxxxxxx~~ very nicely, though it didn't look any too good, but Fred and Captain counted (and judged) the waves just right and we got out again as nicely as I have anywhere. By the way, this and the Houston cruise are the only ones down here on which I didn't get dumped (boat sideways on in surf) and wet at least once.

The chowder party was a grand affair--canned milk, fish, water, hard tack, potatoes, and seasoning, hot in great big pot; had three bowls of it.

One of sub captains, all of whom had been invited, brought along a lot of grand apple pies, some of us had two slabs (six cuts, Navy regulations so Captain Picking said, to the pie). There was ice water in jugs and coffee too. Sat around bonfire in the dark for quite a while and enjoyed starlit night and mosquitoes. But it was a good, well fed, congenial party. I wouldn't have missed it for a very great deal.

Wind: S.E. 2, E.S.E. 2, S.E. 3., S. 3-2-1.

Temperature (a) 80-93 (b) 75-82 (c)

Weather: B - BC - BC C C CP (15-16 p.m.) C.C.C.

C740 Searching party ashore.

April 19, James Bay. Up as usual at 6:30, breakfast at 7, ashore 7:30. Captain, Commander, and I went to look at an inscription sailor off "44" had found day before, four lines and arrow pointing down on side of about largest tree on height or level high ground to left north of lagoon beach. While they looked for 15-20 mins. I went looking for herons nest that man (Tolman or Coleman) of Davidson sub had found on larger, north lagoon in tree overhanging water, scarcely 2 feet off water, but did I have job locating it, with general directions given me (sub left at 9 a.m. and so I could not have the man to direct me). For a long time I wandered about under mangroves and it was mean travelling, then I waded around in water outside of mangrove fringe and still could not find anything. Saw a Geospiza nest high up in tree with few egg ~~xxxxxx~~ shell fragments, apparently still moist or with something edible in them, as they were covered with flies. At first thought it was the nest, but after I photo'd heron with plums out of back of head and a shorter legged, heavier billed and bodied one and had about given ~~ix~~ up I found the real place described to be and flushed one (or the very) stocky heron out of a tree with some noise. Took me a while even then to discover

nest. Three ~~xxxxx~~ young in it, one quite small (distance 3-1/2 feet photo) (maybe I can work size out from that, or from leaves of mangrove), one middle size, but more nearer largest than smallest bird were a quite pea green. Parent heron did not come back whole time, I had to take first photos while sun was under cloud. Wanting to see time, I wandered up beach to pinnacles but found nobody and as sun had meanwhile come back bright and strong, I rushed back for another shot at heron nest. While first wandering around I took pictures of little flock of duck that kept swinging to and fro without much concern. May have been mostly if not all half grown young from one litter.

All told, in islands I've seen maybe 24 pintails, not counting babies, 4 adult on lakes on middle Seymour, 3 on far lakes, and maybe 15-16 + on lagoon at James.

Meanwhile at Villamil Dr. Douglas tells me that natives tell him of great number of ducks on lagoon back of town at certain seasons. Captain Picking speaks of migratory blue wing teal; I contend all pintail and not teal here (who is right).

I have not seen a single flamingo this trip, but on canvassing around find reports of about 2 (Barron saw 2 in flight). Where can they all be?

Anyway, after getting my pictures ~~s~~/taken, Captain sent launch for me and we went down coast to east or northeast looking for Oscar the pet seal, ~~xx~~ now on his fourth escape. We went quite a ways to eastward, hills got scrubby and impenetrable, looking like north side of Indefatigable. Went as far as we dared in time we had; got rained on a little, but and as we were approaching ship had flashed to us (by Morse code with light) that Oscar had returned first ~~xxxx~~ time over side man in charge jumped after him and he swam back into his arms.

Wind: S. 1, S.E. 1-2, S.W. 2-3-2.

Temperature: (a) 81-89 (b) 77-81

Weather: C BC C R 14-16 & at 18 C.P. (16 p.m.) C.R.

CP. (19-22 p.m.) BC

0730 Search party left ship.

1148 Oscar baby seal returned aboard.

April 20.

Wind: S.W. 2 S.E. 4-2-3-1 3 W-1.

Temperature: (a) 78-89 (b) 77-81 (c) 84-80

Weather: BC C C BC CCCC

0255 Underway for Villamil.

1009 Anchored off Villamil in 5-1/4 fms.

True bearing. L.T. Brattle Id. 104°
R.T. Brattle Id. 113°
Red Roof Villamil 020° T

11.12 following passengers came aboard:

Dr. Edward W. Douglas
Paul L. Ervine
Carl Harms
Eric Palmer Jr.

12.44 left anchorage.

19.49 anchored Foster Cove Elizabeth Bay in 25 fms.

April 21, 1941. Monday.

Wind: S.W. - W. N.E. - N. - N.E. - N. 1 N-1-2.

Temperature: (a) 81-89 (b) 78-84 (c) 80

Weather: C C C C BC BC C RRR (15-20) - C C C

0510 Underway Foster Cove to Tagus.

0824 anchored in Tagus Cove.

April 22, Tuesday.

Wind: N. 2 S. 2 S.W. 1 W. 1. S. " S.W. 2. E. 2 S.E. 2-3

Temperature: (a) 80-90 (b) 77-82 (c) 80-84

Weather: C C C B C C C P (20 p.m.) C, B.C.

0453 Underway for Culpepper

0845 Passed Redondo Rk.

16-18 around Culpepper.

April 23, enroute Cocos.

Wind: S.E. 2-4-5-3-2-4 E.N.E. 3 S.E. 3

Temperature (a) 81-89 (b) 78-82 (c) 82-87

Weather: C.P (1 a.m.) C.B.C. C C C C 00 C.B.C. C. CP (23 p.m.)

C.

April 24, enroute Cocos.

Wind: E. 1 S.E. 2 1 2 N. E. 1 - - -

Temperature: (a) 85-98 (b) 80-84 (c) 86-88

Weather: BC BC ~~xxx~~ 00 C C C C C C BC. BC. BC.

12.32 anchored in 10 fms.

LT Conic Id. 103° (T)

RT. Nuez I. 330 (T)

LT. " " 310 (T)

RT Cocos Id. 330° (T)

April 25, Friday.

Wind: SW. 1-2-1 W. 1

Temperature: (a) (b) (c)

Weather: BC BC BC (all day)

April 26, Saturday.

Wind: S.W. 2-1 N.E. 5, E. 2-2, N.E. 1-2, S.E. 1, E. 1.

Temperature: (a) 77-97 (b) 75-85 (c)

Weather: BC - BCL - CC - OR (7 a.m.) - C BC BC BC BC

R (23 p.m.) C

A. m. water samples.

P.m. put away diver coll.; palm hunt; muck soil for seeds.

April 27, Sunday, left at 7:30 a.m. enroute Balboa. Torpedo fired at 8:30 a.m., smoke bomb and slick on water.

Wind: S.W. 2-1 S. 1. S. 1;

Temperature: (a) 80-89 (b) 76-83 (c) 88

Weather: C - C - BC - C. C. C. P. (13 p.m.) C.

0725 Underway for Panama.

0833 sighted periscope.

April 28, Monday. Enroute Balboa.